KT-80

ELECTRONIC MUSICAL INSTRUMENT
INSTRUMENTO MUSICAL ELECTRONICO

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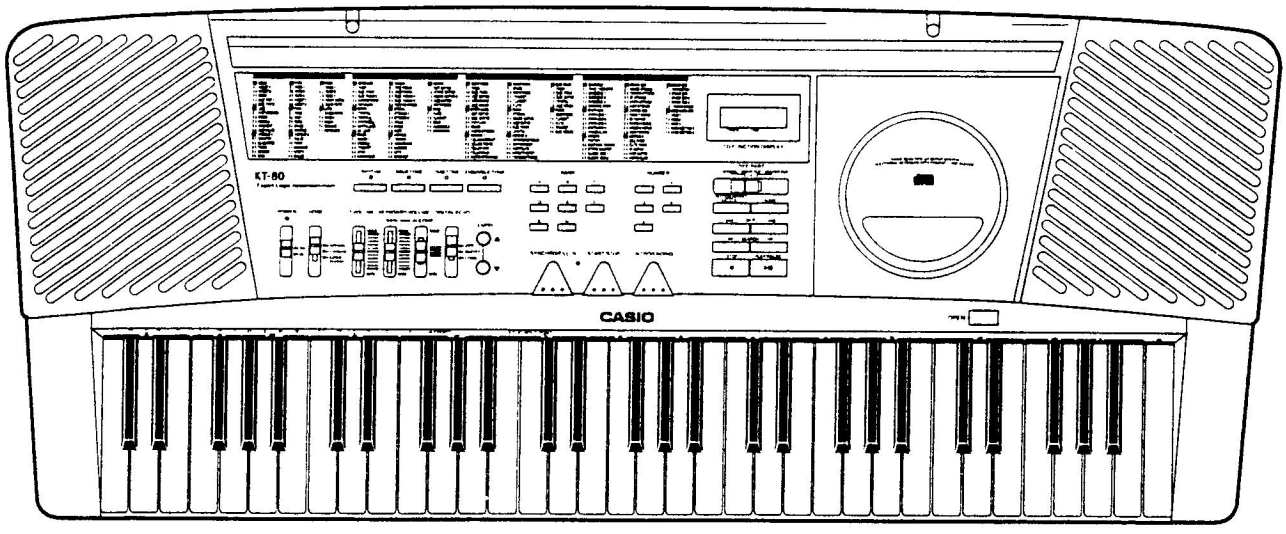
MANUAL DE OPERACION.....32



CASIO

Main Features

★ Compact Disc Player

Besides using the CD player for your listening enjoyment, you can also sing along and play along with the music on the disc. Features like point-to-point repeat, sleep (which automatically switches power off when the end of the disc is reached), and an optional CD control pedal give you full control over playback. You can even cut out the center or right part from the playback for play along or sing along.*

* Compact discs with the vocal recorded in the center or right are best for play and sing along. Note that the type of recording used depends on the type of disc you are using.

★ 120 built-in tones

Outstandingly realistic tones from basic piano to just about any other sound imaginable. Play tones alone in the Solo mode, or mix and match them with the Duo mode (keyboard split between two tones) and Ensemble mode (two tones mixed.)

★ Digital echo

Take your pick between two different digital echo.

★ Stereo pan

Stereo pan effects are built into each tone and rhythm to add more dynamism to the sound output from the speakers and headphones.

★ 40 rhythms

All the rhythm you could ever need, from pops and heavy metal to classic.

★ Expert Logic Accompaniment System

A totally revolutionary new intelligent accompaniment system that automatically selects and plays the accompaniment pattern that matches the key of the chord progression being played. The result is sophisticated accompaniment patterns that are musically logical all the time.

Precaution

If battery power drops below a certain level, the power lamp loses its brightness, the quality of the tone produced deteriorates, sound cuts off suddenly and unexpectedly during keyboard play, a total different tone may sound, the auto-rhythm pattern may become abnormal, CD play may become abnormal or continued sound output even after you release a key. Should any of these symptoms occur, replace batteries as soon as possible.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION : Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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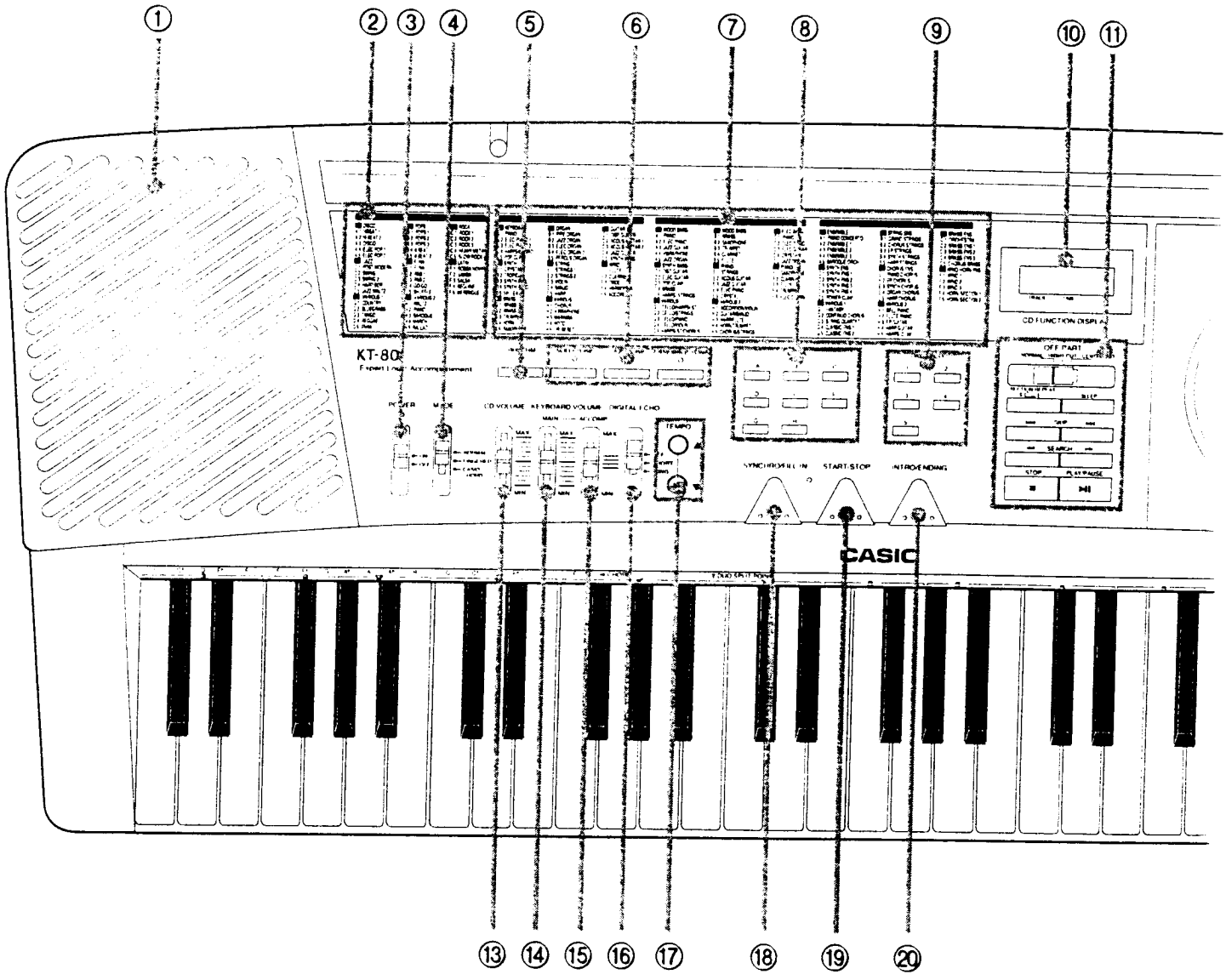
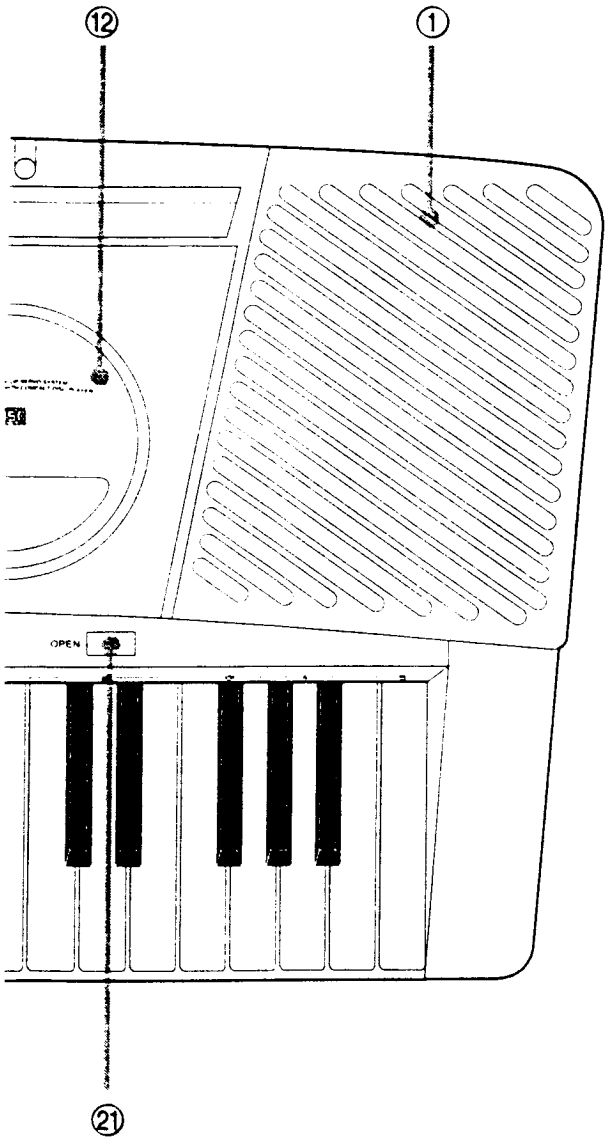
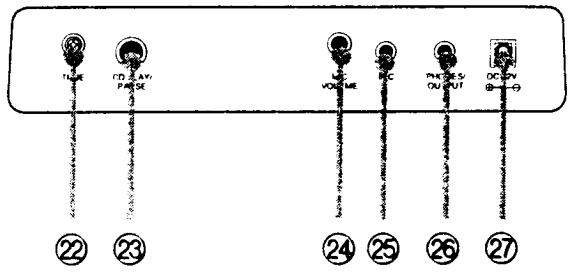
Control Locations



① Speakers
② RHYTHM list
③ POWER switch
④ MODE selector
⑤ RHYTHM button
⑥ TONE buttons (SOLO, DUO, ENSEMBLE)
⑦ TONE list
⑧ BANK buttons
⑨ NUMBER buttons
⑩ CD function display
⑪ CD operating buttons
⑫ CD compartment
⑬ CD VOLUME slider
⑭ MAIN VOLUME slider
⑮ ACCOMP VOLUME slider
⑯ DIGITAL ECHO selector
⑰ TEMPO control buttons
⑱ SYNCHRO/FILL-IN button
⑲ START/STOP button
⑳ INTRO/ENDING button
㉑ CD compartment cover OPEN buttons



<Terminals>



Terminals :

㉒ TUNE control
Adjusts the pitch of the entire keyboard within ±50 cents, for tuning to other instruments. Standard pitch is A4 = 442Hz and accuracy is within ±10%.

㉓ CD PLAY/PAUSE jack
For connection of accessory pedal (SP-2 or SP-10) to start/pause CD play.

㉔ MIC VOLUME control
Controls microphone volume. Note that microphone volume is also affected by MAIN VOLUME setting.

㉕ MIC input jack
For connection of microphone.
* Use only a dynamic type microphone.

㉖ PHONES/OUTPUT jack
For connection of headphones. Output from the speaker is automatically cut when headphones are connected.

㉗ DC 12 V jack
For connection of an AC adaptor (CASIO's AD-12).

Choosing a Power supply

You can power your keyboard with 6 D size (SUM-1/R20P) manganese dry cell batteries. Make sure that the POWER switch is set to the OFF position when installing batteries.

Installing the batteries

This keyboard can be powered by 6 D size (SUM-1/R20P) manganese dry cell batteries. Make sure that the POWER switch is set to the OFF position when installing batteries.

1. Open the battery compartment cover on the bottom of the unit.
2. Load new batteries taking care that the plus (+) and minus (-) poles are facing in the correct directions.

- Standard battery life is approximately 5 hours.

Precaution

If battery power drops below a certain level, the power lamp loses its brightness, the quality of the tone produced deteriorates, sound cuts off suddenly and unexpectedly during keyboard play, a total different tone may sound, the auto-rhythm pattern may become abnormal, CD play may become abnormal or continued sound output even after you release a key. Should any of these symptoms occur, replace batteries as soon as possible.

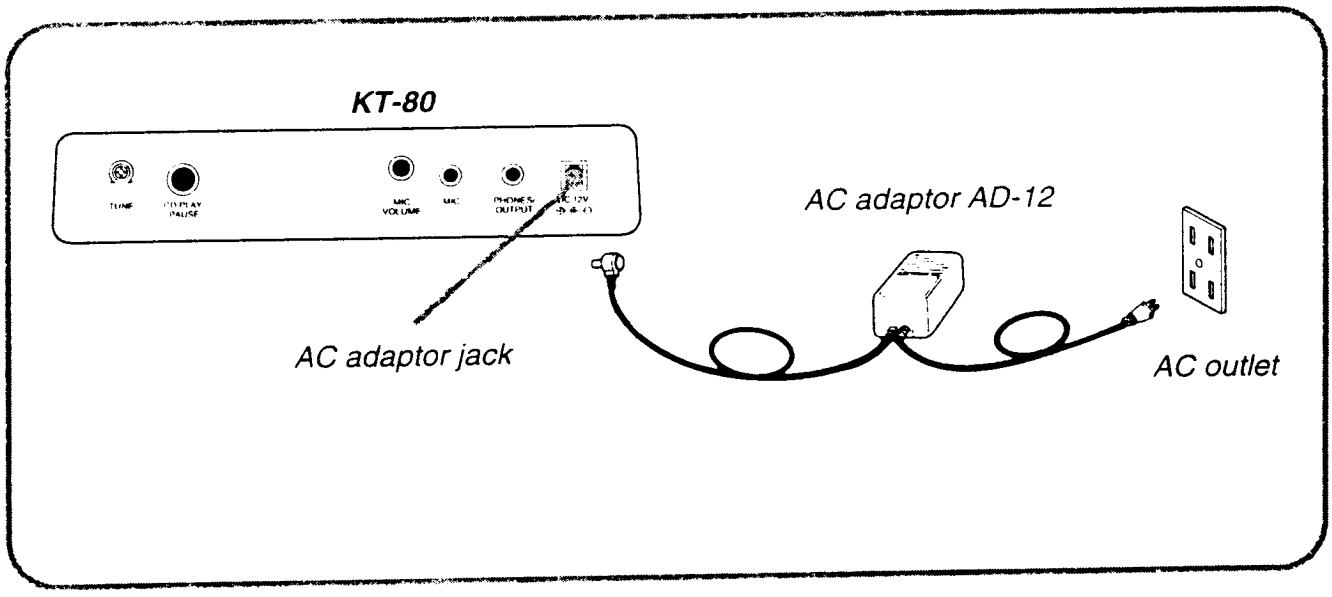
Precautions

Incorrectly using batteries can cause them to leak or burst, and may damage your unit. Note the following precautions:

- Be sure that the plus (+) and minus (-) poles are facing in the correct directions.
- Do not mix battery types.
- Do not mix new batteries with old ones.
- Never leave dead batteries in the battery compartment.
- Remove batteries when not using the unit for extended periods.
- Never try to recharge the batteries that are specified for the power supply of this unit.
- Do not expose batteries to direct heat, let them become shorted or try to take them apart.
  (If a battery leaks, clean out the battery compartment of the unit immediately, taking care to avoid letting the battery fluid come into direct contact with you skin.)

Using AC power

An AC adaptor (AD-12, optional) is required when using household current. Use only a genuine CASIO adaptor with the same voltage rating (100, 117, 220 or 240V) as the power supply in your area to prevent damage to internal components. Be sure to turn the power of the unit off before you connect the adaptor to the unit. Plug the AC adaptor into the AC outlet and the cord into the unit. This will automatically cut off the battery power supply.



Important!

- The adaptor may become warm when it is being used. This is normal and does not indicate any problem.
- Be sure to unplug the adaptor from the power source when you are not using the unit.
- Whenever connecting or disconnecting the adaptor, be sure that the power of the unit is switched off.
- Never use a power supply that does not match that specified for the unit. Doing so can damage the adaptor or your unit.

General Operations

Getting started

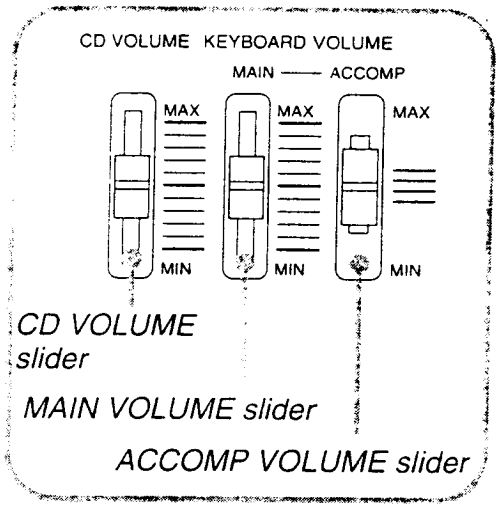
Follow the steps below to get started.

1. Set the POWER switch to ON. The power indicator lights.
2. Adjust the volume level using the MAIN volume slider.
3. Select one of the 120 preset tones (see "Preset Tones", page 10).
4. Now, start playing.

Be sure to switch power off when you are not using the unit.

Adjusting volume

This keyboard features three volume control sliders.



MAIN VOLUME slider

Adjusts the overall volume of the keyboard.

ACCOMP VOLUME slider

Adjusts the volume of the rhythm and the accompaniment pattern.

CD VOLUME slider

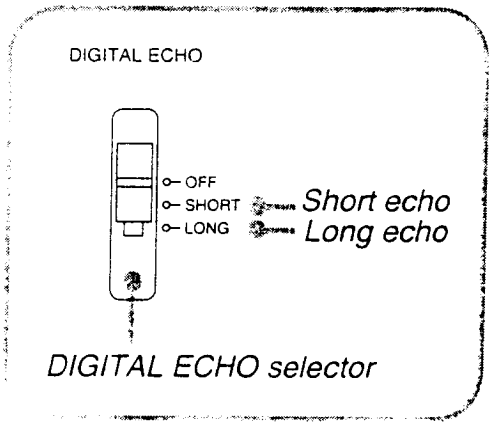
Adjust the volume of the Compact Disc.

Important!

- Always make sure that the ACCOMP VOLUME slider is set at one of the marks along its side. If it is set between two marks, accompaniment and rhythm will not sound.

Digital echo effects

The digital echo built into this keyboard helps to provide your play with more dynamic presence. It works by applying an echo effect to each note as you play it.



To use digital echo

Set the slide to any one of three positions.

OFF: digital echo off
SHORT: Short digital echo
LONG: long digital echo

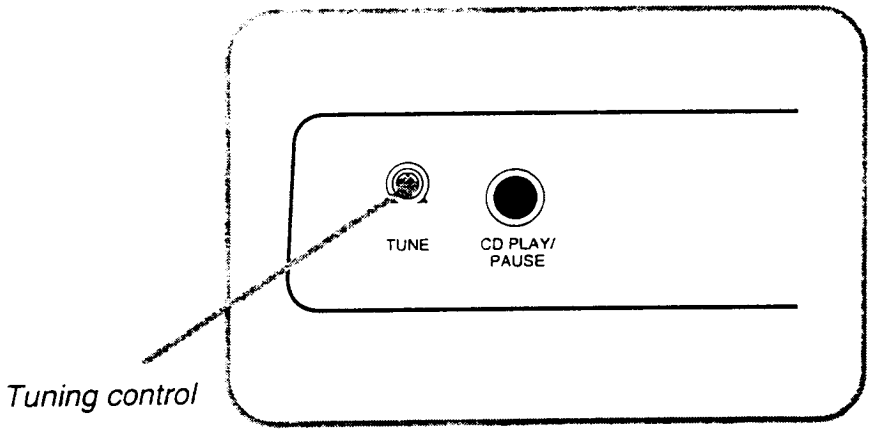
Important!

- Digital echo can distort certain chords. You should try it out with a specific type of music before actually using it.
- Digital echo can be applied to keyboard tones and input through the microphone. It is not applied to output from a compact disc.

Tuning control

You can adjust the pitch of the entire keyboard within ±50 cents using the tuning control on the rear panel. This allows easy tuning with CD play or other instruments.

*100 cents = half note

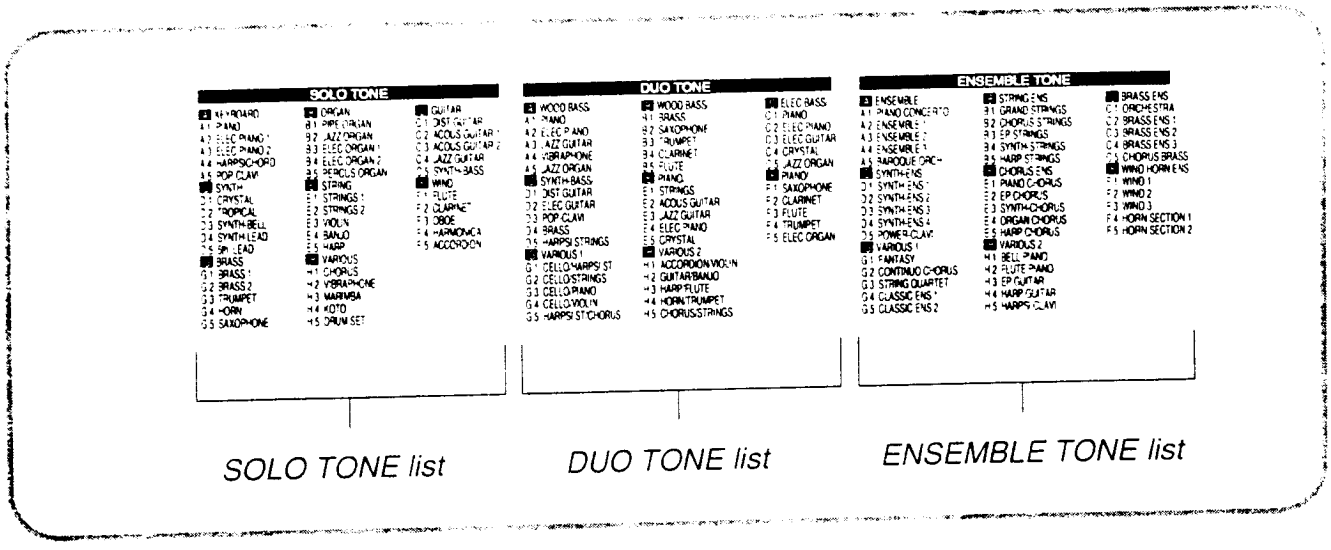


Preset Tones

This keyboard gives you access to a total of 120 preset tones, which are divided into categories that contain 40 tones each: SOLO, DUO, ENSEMBLE.

How to use the Tone List

A Tone List is printed on the panel of the keyboard to show you the BANK and NUMBER inputs required for each tone in the Solo, Duo and Ensemble modes.



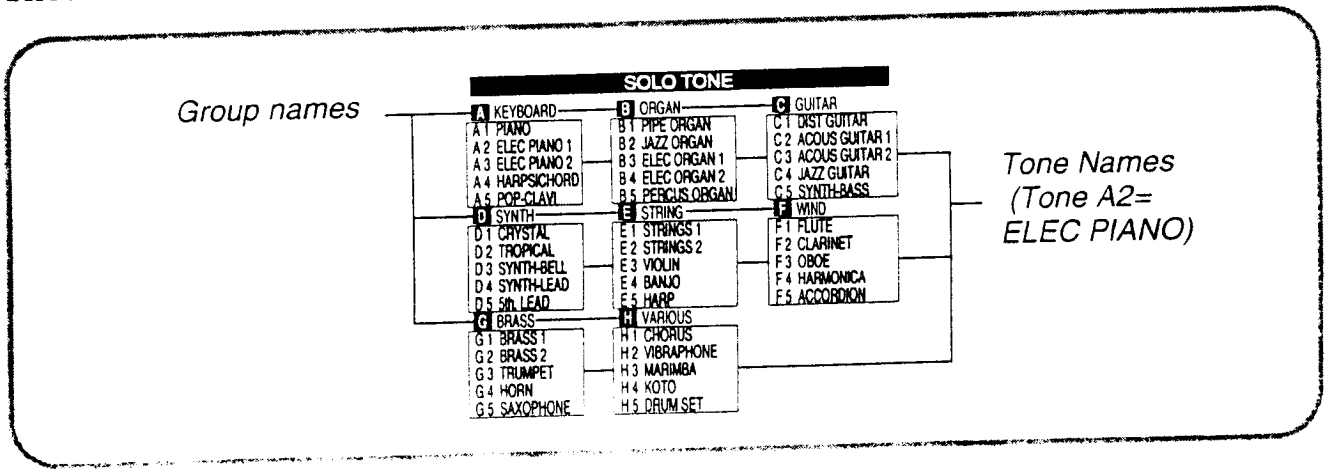
SOLO TONE list — These single tones sound on across the entire keyboard when the indicator above the SOLO TONE button is lit.

DUO TONE list — The tone combinations in this list are available when the indicator above the DUO TONE button is lit.

ENSEMBLE TONE list — The tones in this list are created by combining two other tones. They sound on across the entire keyboard when the indicator above the ENSEMBLE TONE button is lit.

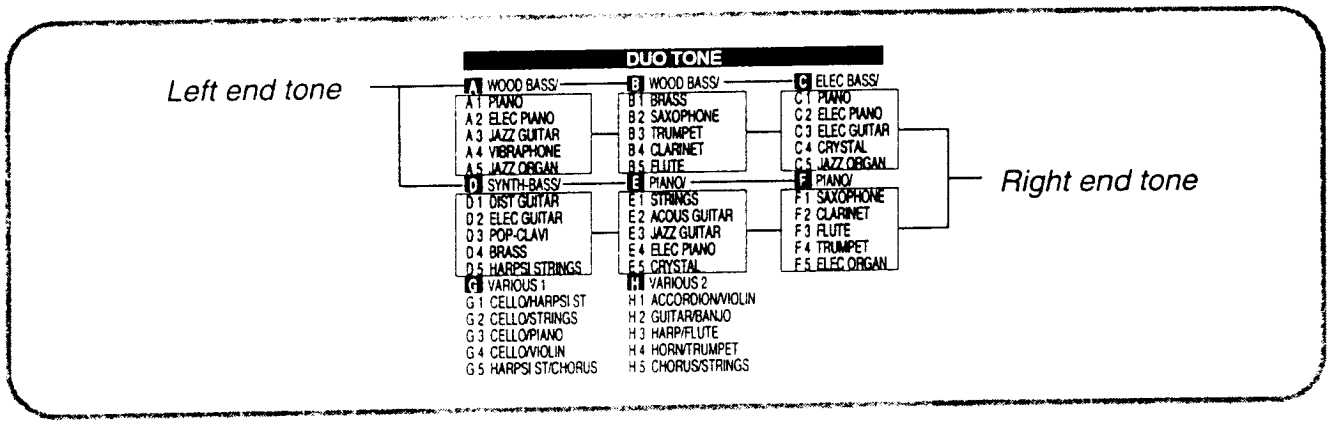
SOLO TONE List

These tones are classified according to groups, from A through H.



DUO TONE list

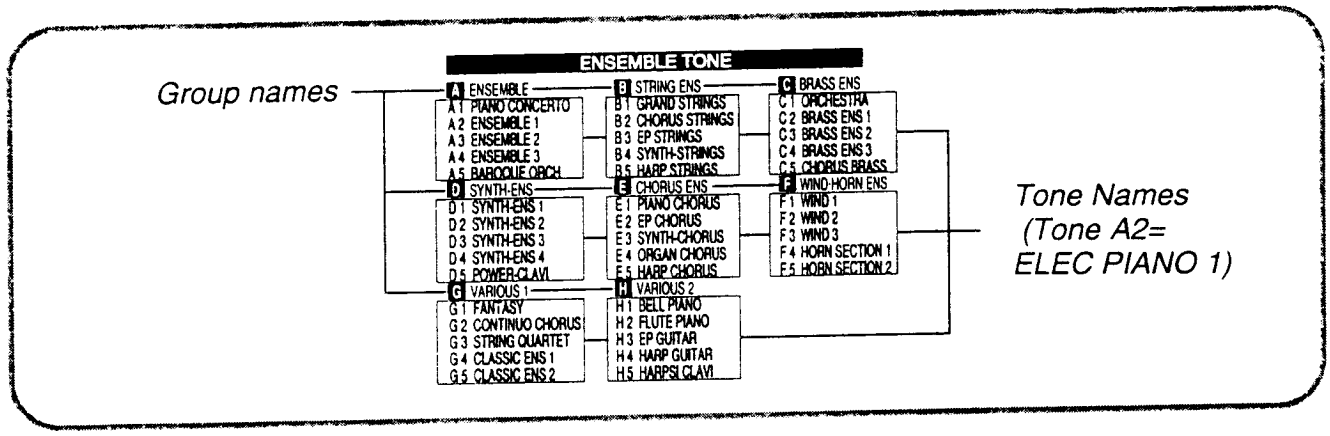
These tones are separated between the tone that sounds on the left end of the keyboard and the tone that sounds on the right.



Note [G] VARIOUS 1 and [H] VARIOUS 2 in the DUO TONE LIST. Each of the items in these categories shows both the left side and right side tones (H3 = HARP/ FLUTE).

ENSEMBLE Tone List

As with the SOLO tone list, these tones are classified according to groups, from A through H.

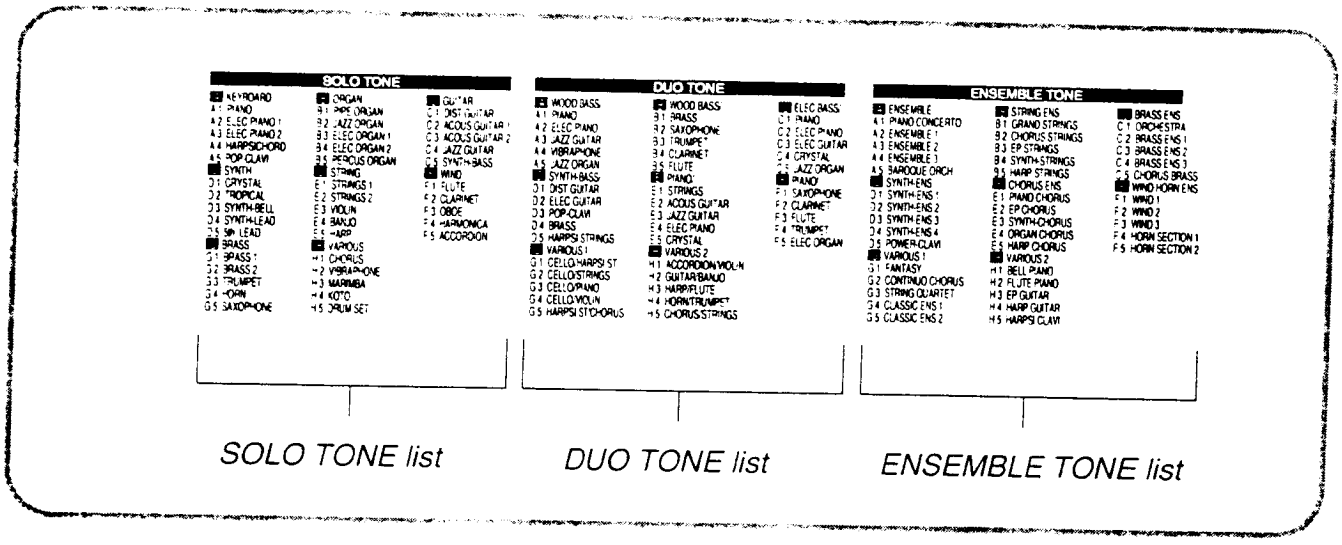


Preset Tones

This keyboard gives you access to a total of 120 preset tones, which are divided into categories that contain 40 tones each: SOLO, DUO, ENSEMBLE.

How to use the Tone List

A Tone List is printed on the panel of the keyboard to show you the BANK and NUMBER inputs required for each tone in the Solo, Duo and Ensemble modes.



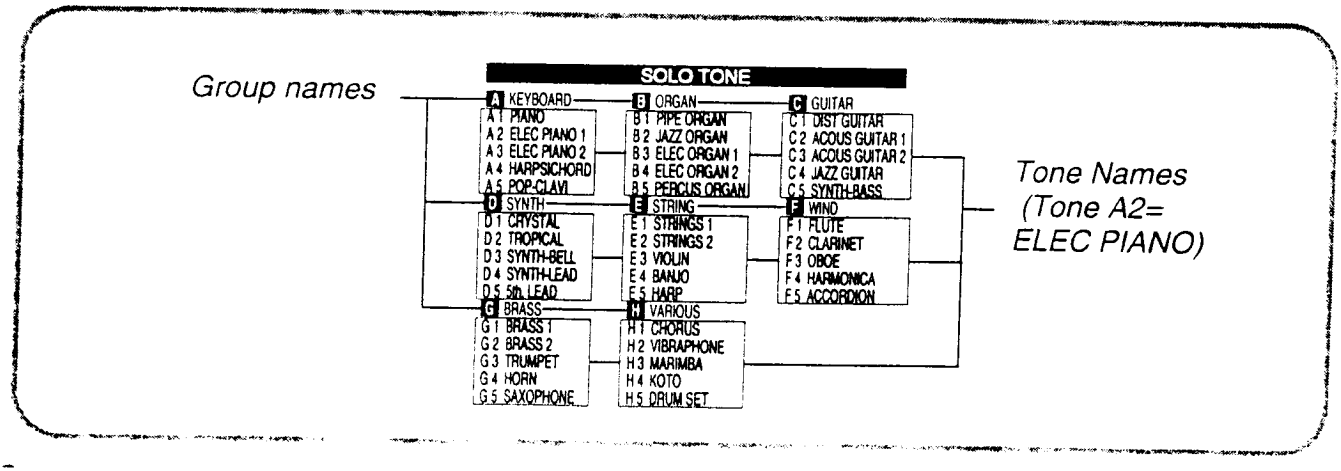
SOLO TONE list — These single tones sound on across the entire keyboard when the indicator above the SOLO TONE button is lit.

DUO TONE list — The tone combinations in this list are available when the indicator above the DUO TONE button is lit.

ENSEMBLE TONE list — The tones in this list are created by combining two other tones. They sound on across the entire keyboard when the indicator above the ENSEMBLE TONE button is lit.

SOLO TONE List

These tones are classified according to groups, from A through H.



Notes

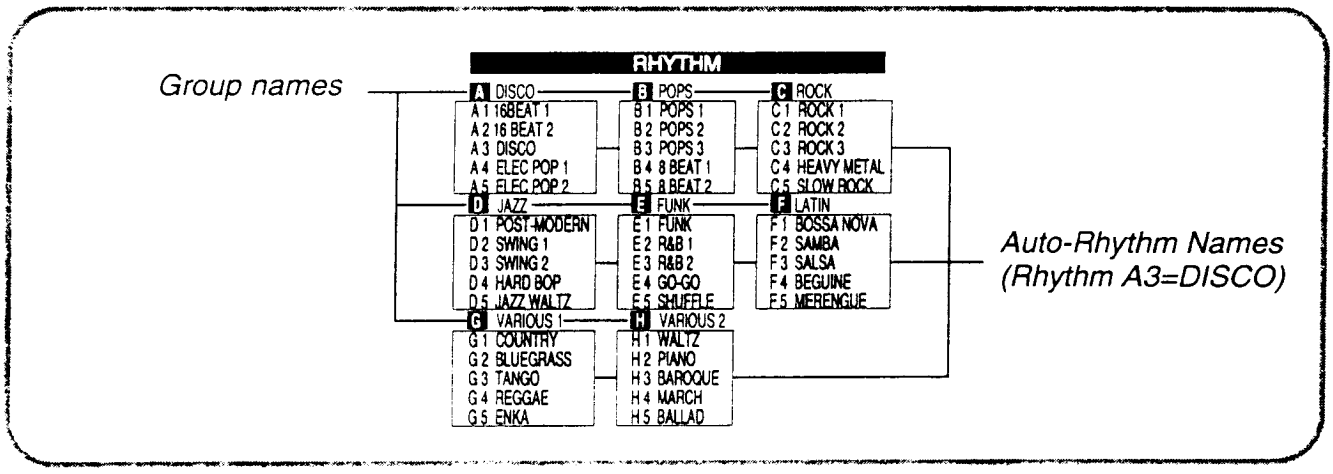
- The last tone selections you make from the SOLO TONE, DUO TONE, and ENSEMBLE TONE lists are retained when you switch over to another list. That means the last tone you selected will still be selected when you return to that list again.
- Whenever you switch power off, your tone selections are cleared. Switching power on automatically selects tone A1 (PIANO) of the SOLO TONE list. When you enter another list after switching power on, the corresponding A1 tone is selected automatically.
- If you press a NUMBER button only, the tone will change to that tone number within the same bank. This means that if tone B5 is currently selected, pressing NUMBER button 3 switches to tone B3.
- If you press a BANK button only, the tone will change to the same tone number within the bank you selected. This means that if tone B5 is currently selected, pressing BANK button F switches to tone F5.
- This keyboard is capable of producing a maximum of 16 notes at the same time. Some tones can produce only 8 notes simultaneously, and some of the ENSEMBLE tones can produce only 4 notes. The number of notes that can be played at the same time is also reduced when rhythm is being played, when you are using Auto-Accompaniment, etc.

Auto Rhythms

The Rhythm list printed on the panel of the keyboard shows you the BANK and NUMBER inputs required to select from among the 40 built-in auto-rhythm patterns.

Rhythm List

Auto-rhythms are classified according to groups, from A through H.



To select an auto-rhythm

1. Press the RHYTHM button. The indicator above the button should light.
2. Press the BANK button (A through H) for the auto-rhythm you want to select.
3. Press the NUMBER button (1 through 5) for the auto-rhythm you want to select.

Example:

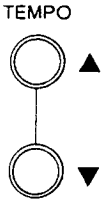
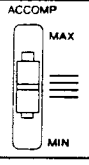
To select SALSA, which is auto-rhythm F3.

1. Press the RHYTHM button and the indicator above it lights.	RHYTHM ○
2. Press the BANK F button.	F
3. Press the NUMBER 3 button. Now if you press the START/STOP button, you will hear the SALSA rhythm.	3

Notes

- The last auto-rhythm selection you make is retained until you switch power off. Switching power on automatically selects auto-rhythm A1 (16 BEAT 1).
- If you press a NUMBER button only, the auto-rhythm will change to that auto-rhythm number within the same bank. This means that if auto-rhythm B5 is currently selected, pressing NUMBER button 3 switches to auto-rhythm B3.
- If you press a BANK button only, the auto-rhythm will change to the same auto-rhythm number within the bank you selected. This means that if auto-rhythm B5 is currently selected, pressing BANK button F switches to auto-rhythm F5.

To play an auto-rhythm

1. After selecting an auto-rhythm, press START/ STOP button to start the rhythm.	
2. Adjust the tempo using the TEMPO control buttons. Each press of ▲ speeds up the tempo, while pressing ▼ slows it down. • Tempo of the auto-rhythm can be adjusted between 40 and 256 beats per minute. • Pressing both TEMPO control buttons at the same time sets the tempo to 132 beats per minute.	
3. You can adjust the volume of the rhythm by using the ACCOMP VOLUME slider.	
4. Press the START/STOP button again to stop auto-rhythm play.	

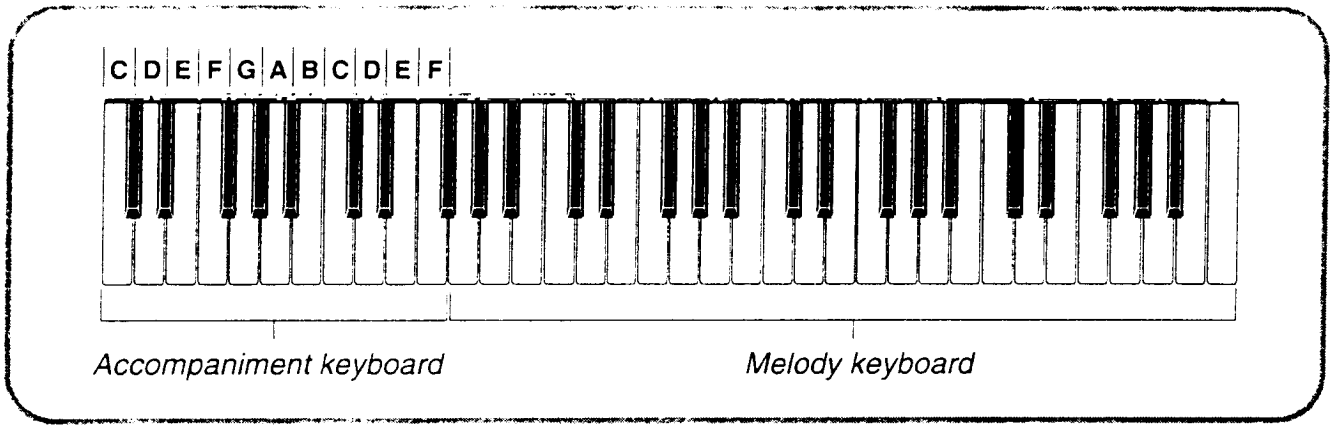
- You can add some variation to the auto-rhythm play by pressing the INTRO/ ENDING and SYNCHRO/FILL-IN buttons. See pages 19 through 20 of this manual for details.

Auto-accompaniment

This unit features 40 accompaniment patterns that let you add full accompaniments to your performances automatically.
You can select from two types of auto-accompaniment – simplified fingering chord play (CASIO CHORD) or standard fingering (FINGERED).

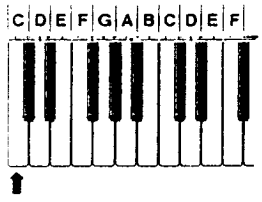
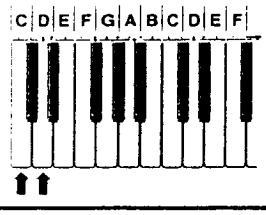
Accompaniment keyboard

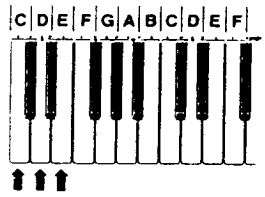
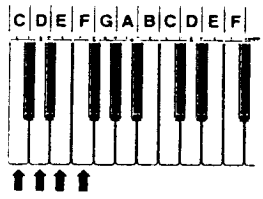
When you set the mode selector to FINGERED or CASIO CHORD , the keys of the lower 1.5 octave of the keyboard are the accompaniment keys and the rest of the keyboard is the melody section.



Playing an accompaniment using CASIO CHORD

The CASIO Chord system lets you easily play the four main types of chords. Playing of the chords is simplified as shown in the chart below.

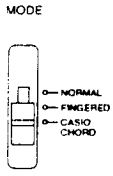
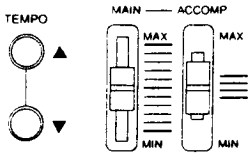
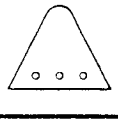
Keys	Chord Type	Example
Pressing **one** accompaniment key	Major chord	**C** (C Major Chord) 
Pressing **two** accompaniment keys	Minor chord	**Cm** (C Minor Chord) 

Keys	Chord Type	Example
Pressing **three** accompaniment keys	Seventh chord	**C7** (C Seventh Chord) 
Pressing **four** accompaniment keys	Minor seventh chord	**Cm7** (C Minor Seventh Chord) 

Note

The bottom note that you play determines the name of the chord. For example, if the bottom note is C, the keyboard plays a C chord.

Follow these steps to play the CASIO Chord auto-accompaniment.

1. Set the MODE selector to the CASIO CHORD position.	
2. Select one of the auto-rhythms. (refer to "Auto-rhythms" on page 14)	
3. Start the auto-rhythm by pressing the START/STOP button.	
4. Press one to four accompaniment keys. The accompaniment automatically plays.	
5. Adjust TEMPO [▲/▼], MAIN-VOLUME slider, and ACCOMP VOLUME slider.	
6. Press the START/STOP button to stop the auto-accompaniment.	

Note

You can also use introductions, fill-ins and ending patterns in your accompaniment performance. See pages 19 and 20 for details.

Playing an accompaniment using standard fingering

The standard fingering (FINGERED) mode lets you play a wider variety of chords. You can start an accompaniment pattern by pressing down either three or four of the proper accompaniment keys.
This unit is capable of recognizing 12 different chords. The following shows the fingerings of the recognized chords with a root of C. Note that you can omit the fifth note (which are within parentheses in the illustrations below) to produce 7, m7, maj7 and mM7 chords.

C

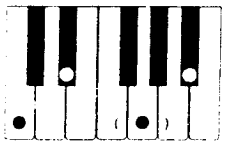
Cm

Cdim

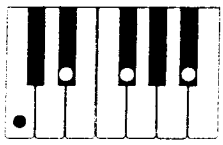
Caug

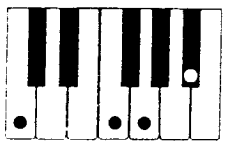
Csus4

C7

Cm7


Cmaj7

Cm7^{-5}


C7sus4


CmM7

Cdim7

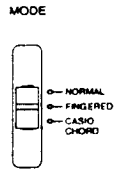
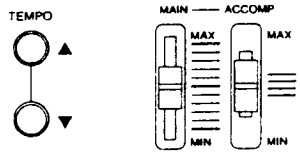
Note that you have to press either 3 or 4 proper accompaniment keys as shown above to start the accompaniment play. Fingered chord with less than 3 notes produces no response.

Notes (Except for "aug" and "dim7")

Each of the above examples shows only one of the possible fingerings for each chord. Note that you can play a chord by pressing its notes in any combination. For example, each of the following fingerings produce the same C chord.

- See the "List of fingered chord" on page 62 to 63 for information on the fingering of chords with all the roots.

Follow these steps to play the standard fingering auto-accompaniment.

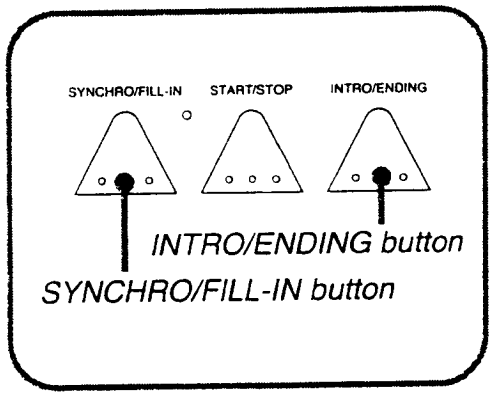
1. Set the MODE selector to the FINGERED position.	
2. Select one of the auto-rhythms. (refer to "Auto-rhythms" on page 14)	
3. Start the auto-rhythm by pressing the START/STOP button.	
4. Press the accompaniment keys for the desired chord.	
5. Adjust TEMPO [▲/▼], MAIN VOLUME slider, and ACCOMP VOLUME slider.	
6. Press the START/STOP button to stop the auto-accompaniment.	

Note

You can also use introductions, fill-ins and ending patterns in your accompaniment performance. See page 20 for details.

Using INTRO/ENDING button and SYNCHRO/FILL-IN button

These 2 buttons give you control over the rhythm and accompaniment patterns. When the MODE selector is in the FINGERED or CASIO CHORD position, you can control all of the accompaniment patterns. When it is in NORMAL position, you can control the rhythm patterm only.



INTRO/ENDING button

Use this button to perform the two operations described below.

- To start the accompaniment pattern
  When you press the INTRO/ENDING button instead of the START/STOP button to start the accompaniment pattern, the keyboard plays a 2-measure intro before going into the standard accompaniment pattern.

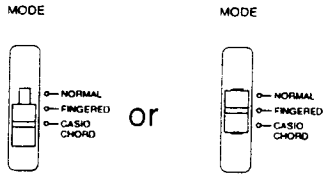
- To end the accompaniment pattern
  When you press the INTRO/ENDING button instead of the START/STOP button to end the accompaniment pattern, the keyboard plays a 2-measure ending before ending the accompaniment pattern.

SYNCHRO/FILL-IN button

You can use this button to perform the two operations described as follows.

- To insert a fill in pattern
  When you press the SYNCHRO/FILL-IN button while Auto-Accompaniment is playing, an appropriate fill-in is inserted into the rhythm pattern. If you hold the button down, the fill-in pattern is repeated until the end of the measure during which you release the button.

To synchronize the start of the accompaniment pattern with your play of the keyboard, as described in the following procedure.

1. Set the MODE selector to the CASIO CHORD or FINGERED position.	
2. Select an auto-rhythm (page 14).	
3. Press the SYNCHRO/FILL-IN button. The indicator above the button should light. • At this time, you could press the INTRO/ENDING button (see above). If you do, the keyboard will play a 2-measure intro pattern before going into the auto-accompaniment pattern.	
4. When you are ready, press the accompaniment keys to play the first chord. As soon as you do, the auto-accompaniment pattern beings to play.	
5. To stop the auto-accompaniment pattern play, press the START/STOP button.	

About "Expert Logic Accompaniment"

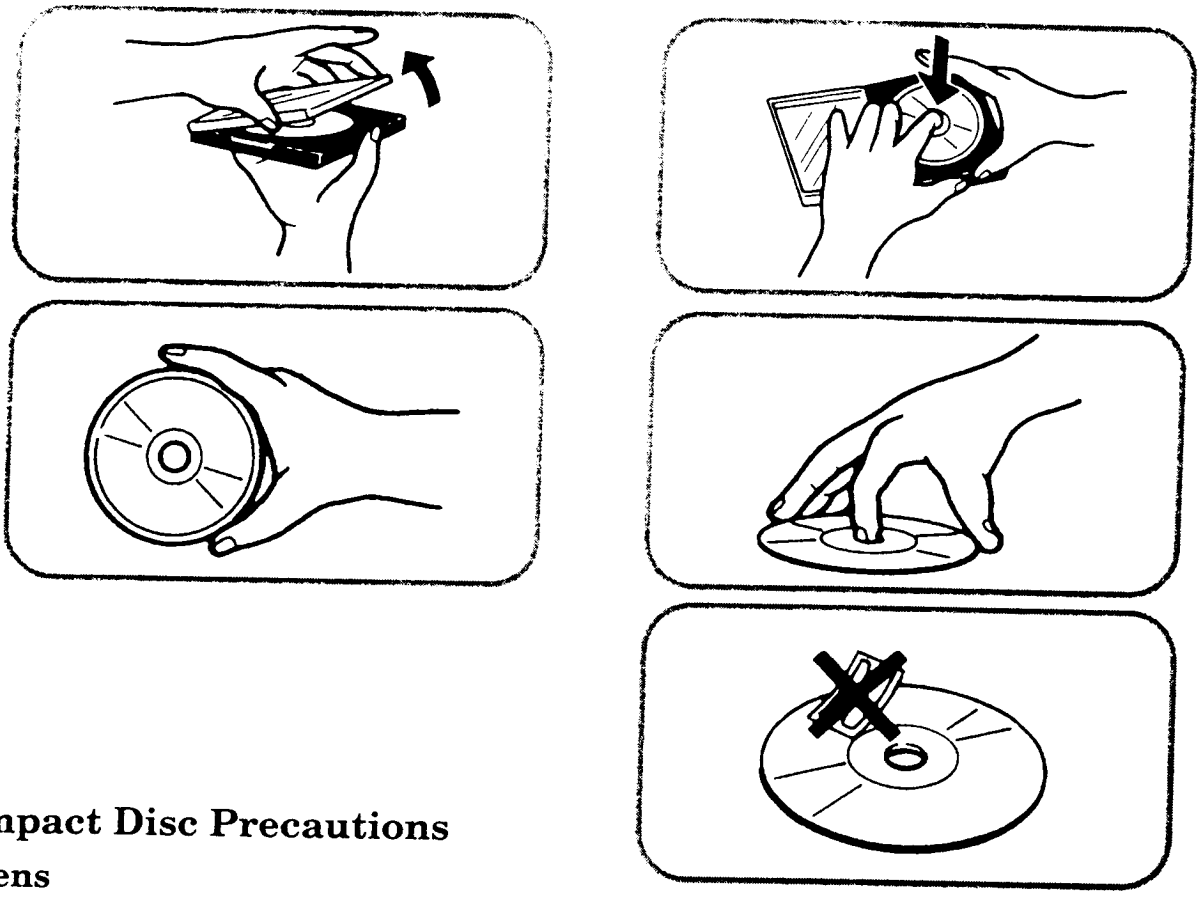
The Auto-Accompaniment system of this keyboard employs a revolutionary new system that is unlike anything ever before available on an electronic keyboard. Expert Logic Accompaniment is a totally revolutionary new intelligent accompaniment system that makes real-time decisions about chord progressions. Based on key judgement logic, this system automatically selects and plays the appropriate accompaniment pattern to match the key of the chord progression being played. This means it plays different patterns for the same major chord, depending on whether the chord is being used as a tonic or subdominant. The result is sophisticated accompaniment patterns that are musically logical all the time.

Using the compact disc functions

About discs...

Handling

- Always pick up discs by grasping them from the edges, to avoid getting fingerprints on the disc surface.
- Be careful to avoid damaging discs.
- Never affix paper or labels to the surface of a disc and never write on a disc.



Compact Disc Precautions

- **Lens**

A lens inside the compact disc compartment reads the data recorded on the disc. Note the following points about the lens.

- To protect the lens against dirt and dust, be sure to keep the CD compartment cover closed.
- Do not touch the lens with your fingers or with sharp objects. A dirty or scratched lens will cause problems with disc play.

- **Skipping**

Any of the following can cause skipping to occur during disc play.

- Use of a damaged, dirty, or warped disc
- Strong impact of the unit. Very strong impact can cause disc play to stop entirely and may make further play impossible. Should this happen, switching power off and then back on should correct the problem.
- Playing a disc inside a car or any other area subjected to strong vibration.
- The sounds recorded on the disc itself. In this case, simply turn down the volume during disc play.

- **Power Supply**

If the power supply is temporarily interrupted while disc play is in progress, the disc play may stop and the display may show strange markings. Should this happen, switching power off and then back on should correct the problem.

Disc handling precautions

- Never allow alcohol, water, or record cleaner to come into contact with the disc surfaces.
- If the disc becomes soiled with fingerprints or dirt, wipe it off with a soft cloth. Wipe from the center of the disc outwards.
- When storing a disc, avoid areas subjected to direct sunlight, high temperatures and high humidity. These factors can cause the disc to warp and crack, making them unplayable.
- Be sure to store discs inside their cases when not using them.
- Make sure that a disc has completely stopped moving before trying to remove it from the keyboard's CD compartment.

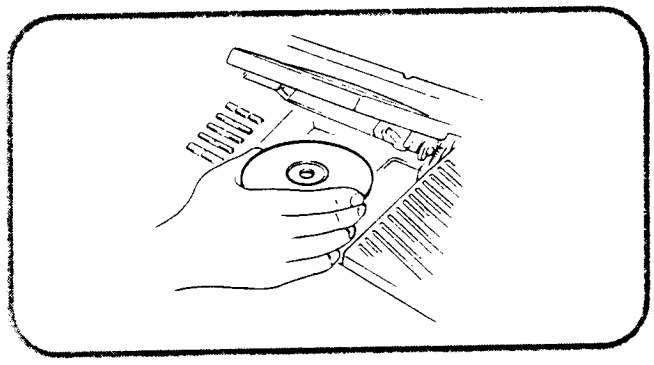
Playing a Compact Disc

To play all selections on a disc

1. Switch power on and set the Mode Switch to any position.

2. Press the OPEN button to open the CD compartment cover.

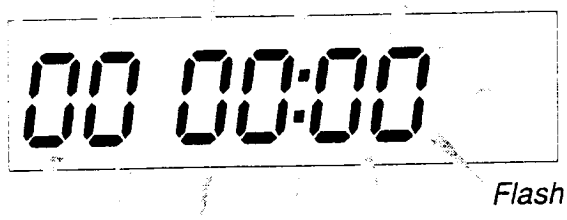
3. Insert the disc you want to play into the CD compartment. Make sure that the label side of the disc is facing up (so you can see it).



- Be sure to keep the CD compartment cover closed when not inserting or removing discs.

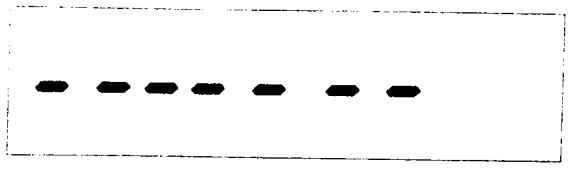
4. Close the CD compartment cover and make sure that it securely locks shut by pressing down on its lower right corner.

- The following display appears while the unit reads control data from the disc.



- After a few seconds, the total number of selections on the disc and its total play time appear on the display. This information also appears on the display if you switch power on while a disc is inside the compartment.

- Whenever the right display message appears, remove the disc and try reinserting it correctly.



◆ Disc is not set properly.
◆ Disc compartment cover is open.
◆ Disc data cannot be read due to dirt, dust, vibration, etc.

5. Check to make sure that the volume is not set too high.

6. Press the PLAY/PAUSE button to start play of the disc.

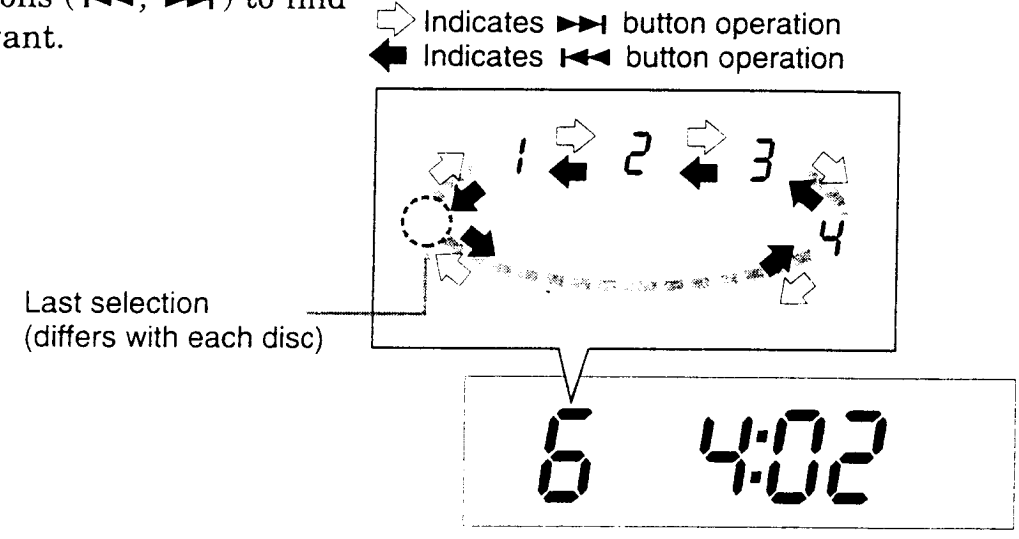
7. Press the STOP button when you want to stop disc play.

Important!

- Do not open the CD compartment cover while the unit is reading control data from the disc.
- When removing a disc from the CD compartment, first press STOP and check to make sure that the disc has completely stopped moving.

Playing back a specific selection

Use the SKIP buttons (⏮, ⏭) to find the selection you want.



- You can also use the SKIP buttons (⏮, ⏭) to change the selection number while disc play is in progress.

- Pressing the ⏮ button while a disc play operation is in progress returns play to the beginning of the current selection.

Stopping disc play

Press the STOP button to stop playback of a disc.

Pausing disc play

Press the PLAY/PAUSE button to pause disc play at any point. To resume play from that point, press PLAY/PAUSE again.

Fast forward

You can fast forward through the contents of a disc while disc play is in progress or while disc play is paused. Hold down the ►► SEARCH button and the disc fast forwards. You can hear the contents of the disc as they play at high speed. When you get to the point you want, release the ►► SEARCH button. If you started from a disc play operation, normal disc play resumes when you release ►► SEARCH. If you started from a PAUSE, the unit goes back into a PAUSE at the point where you release ►► SEARCH.

Fast reverse

The fast reverse operation is identical to the fast forward operation except that you use the ◄◄ SEARCH button for the operation, and (of course) the fast play operation is in the opposite direction.

Point-to-point repeat

This function lets you repeat disc play between any two points, which is handy for practicing difficult passages.

1. Press the PLAY/PAUSE button to start disc play.

2. When play reaches the point from where you want to start the repeat, press the Point-To-Point Repeat Button. At this time, the indicator "E" appears on the display.

Flash

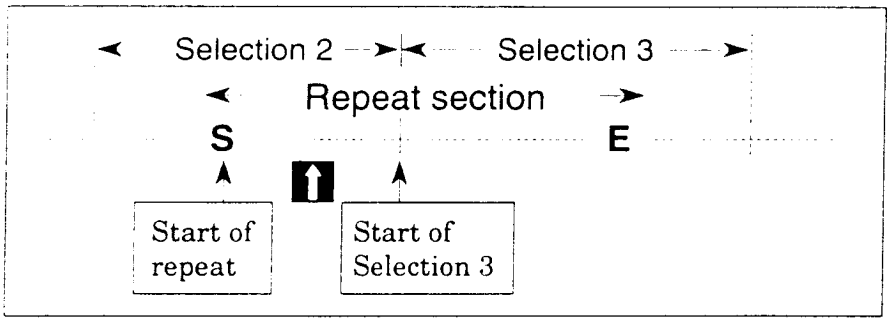
3. When play reaches the point where you want to end the repeat, press the Point-To-Point Repeat Button again. At this time, the repeat operation starts, and so it returns to the first point you defined in step 2.

4. To clear a Point-To-Point Repeat play operation and return to normal disc play, press the Point-To-Point Repeat Button.

- To stop disc play while a Point-To-Point Repeat operation is in progress, press the STOP button.

Notes

- With Point-to-Point Repeat, the section you repeat can extend between multiple selections.
- You can use the SKIP buttons (⏮, ⏭) during a Point-to-Point Repeat operation as illustrated below.



▮: Current position

- Pressing ⏭ SKIP jumps to the beginning of Selection 3. Pressing ⏭ SKIP again jumps to the beginning of the repeat section.

- Pressing ⏮ SKIP jumps to the beginning of the repeat section.

About the Sleep function

Press the SLEEP button during disc play, and the unit automatically switches power off when the end of the disc is reached. This function comes in handy if you like to listen to music when going to bed at night.

- To cancel the Sleep function before the end of the disc is reached, press the SLEEP button again or press the STOP button.
- Note that the SLEEP button is operational only while disc play is in progress.

About the CD Standby Mode

If you do not perform any CD operation for about 10 minutes while disc play is stopped, the display automatically switches off. To resume normal operation, press the PLAY/PAUSE button.
If you do not perform any CD operation for 10 minutes while disc play is paused, the unit automatically cancels the pause. If no operation is performed for 10 more minutes, the unit enters the Standby Mode.

Singing along and playing along with a disc

You can cut out the center or right part from disc play, and then sing or play along with the remaining accompaniment. Remember that with some discs, you may not be able to completely cut out the vocals or leads. All of this depends on how the disc was originally recorded.
The following shows the settings of the Off Part slider and what they provide.

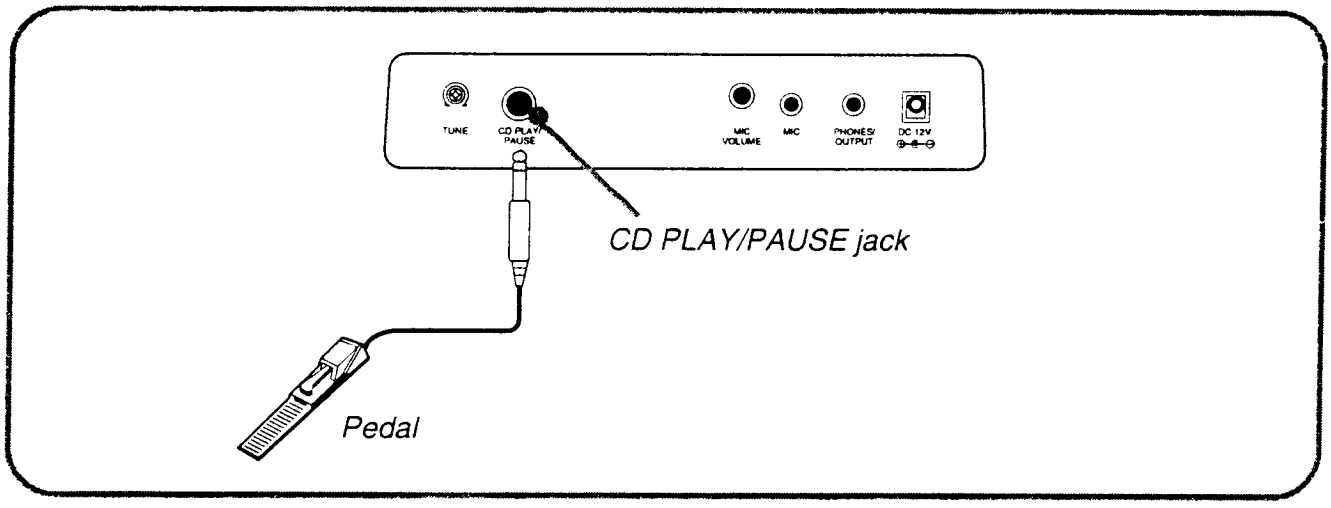
NORMAL: Normal stereo play
RIGHT CUT: Cuts out the right channel and plays back the remaining output through both speakers.
CENTER CUT: Cuts out the center part.

- Note that you can also use digital echo when playing or singing along with a disc.
- The Off Part function can be used during CD operations only.

Controlling the CD player with a pedal

CD play start and pause operations are generally performed using the buttons in the center of the control panel. When you want to keep your hands free for keyboard play, you can use an optional sustain pedal to control these operations.

- Connect the sustain pedal (optional SP-2/SP-10) to the keyboard's CD PLAY/PAUSE jack.



Troubleshooting

If your keyboard operates erratically, replace the batteries or shift to one of the alternate power sources mentioned in "Choosing a Power supply" on page 6. If the keyboard continues to operate erratically, use the following troubleshooting chart to correct the problem.

Trouble	Possible Cause	Remedy
No sound, even if keys are pressed.	1. Headphones connected. 2. Auto Power Off or CD Sleep function have switched power off.	1. Disconnect headphones. 2. Set the POWER/CHORD selector to OFF and then ON again.
No accoumpaniment and/or rhythm sound.	1. ACCOMP VOLUME slider turned down. 2. ACCOMP VOLUME slider not in correct position.	1. Turn up the ACCOMP VOLUME slider. 2. Make sure ACCOMP VOLUME slider is set at a mark and not between two marks.
No accompaniment even if accompaniment keys are pressed.	MODE selector is set to "FINGERED" and accompaniment keys are not pressed correctly (Fingered chord with less than 3 notes produces no response.)	Press either 3 or 4 proper accompaniment keys as shown on page 18.
Sound cuts off suddenly and unexpectedly during keyboard play, with keyboard set up changing to power on default settings.	Dead batteries.	Replace batteries with new ones.
Occasional interference.	Refrigerators, washing machines and similar electric appliances.	Use outlet as far away as possible from appliance thought to be the cause.
No sound when connected to external amplifier.	Defective connection cord.	Replace connection chord.
CD player does not work.	1. Disc is loaded upside down. 2. Disc is very dirty. 3. Disc play is paused.	1. Make sure the disc's label is facing up (so you can see it). 2. Clean off the disc. 3. Press the PLAY/PAUSE button.

Trouble	Possible Cause	Remedy
No sound produced by CD play.	1. CD volume is set to minimum. 2. Headphones are plugged in.	1. Move the volume controller more towards the maximum setting. 2. Unplug the headphones.
Skipping during CD play.	1. Damaged disc 2. Dusty or dirty disc 3. Vibration	1. Change to an undamaged disc. 2. Wipe off the disc with a soft, dry cloth. 3. Move to a location without vibration. Do not allow impact to the keyboard while a disc is playing.
No melody or vocal during disc play.	The off part switch is set to "RIGHT CUT" or "CENTER CUT".	Slide the off part switch to "NORMAL"

Care of Your Keyboard

Avoid heat, humidity or direct sunlight.

Do not overexpose the unit to direct sunlight, or place near an air conditioner, or in any extremely hot place.

Take care not to drop the unit and avoid strong impact.

Strong impact may cause malfunctions. When carrying or transporting the unit, protect the keyboard and switches with soft cloth or other material.

Keep the unit free of liquids, dust, etc.

Do not allow foreign matter to get between the keys, especially metallic objects such as hairpins, sewing needles or coins. Also, do not let the unit get wet.

Never attempt to modify any parts of the unit.

The unit is a precision instrument, made of electronic parts. Any modification of, or tampering with inner parts may cause malfunction.

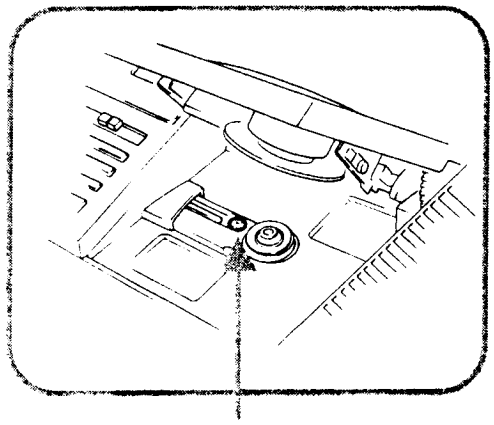
Do not use lacquer, thinner or similar chemicals for cleaning.

Clean the keyboard with a soft cloth dampened in a weak solution of water and a neutral detergent. (Soak the cloth in the solution and squeeze until it is almost dry.)

User Maintenance

- **Lens (inside CD compartment)**

A dirty lens can result in skipping during disc play. When this happens, open the CD compartment cover and use a commercially available lens cleaner to clean off the lens. Remember to take care to avoid scratching the lens when cleaning it!



Lens

Specifications

■ Keyboard

Number of keys:	61
Polyphony:	8-note
Preset tones:	120
Auto rhythms:	40
Auto-accompaniment:	CASIO CHORD/FINGERED
Musical controller:	SYNCHRO/FILL-IN, START/STOP, INTRO/ENDING
Digital Effects:	DIGITAL ECHO (SHORT, LONG)
Tuning control:	A4=442Hz±50 cents

■ Compact disc player

Controllers:	CD volume, PLAY/PAUSE, SKIP, STOP, SEARCH, SLEEP, Point-To- Point Repeat
Off Part Function:	Right Cut/Center Cut
Foot Pedal control:	Play/Pause

■ General

Built-in speakers:	12 cm dia. x 2 (output = 3.1 W + 3.1 W)
Terminals:	PHONES/OUTPUT jack [output impedance: 110Ω, output voltage:5.5 V (RMS) MAX], Mic input jack (input impedance; 6.8KΩ, input sensitivity; 10mV), CD PLAY/PAUSE jack
Power source:	2-way AC/DC power sources; AC:100, 117, 220 or 240 (±10V), 50/60 Hz, with optional AC adaptor AD-12. DC: 6 D size dry batteries Battery life; approx. 5 hours with manganese batteries (SUM- 1/R20P)
Power consumption:	14.4 W
Dimensions (W x D x H):	980 x 411 x 139 mm (38 9/16" x 16 3/16" x 5 1/2")
Weight:	8.1 kg(17.9lbs) including batteries
Standard accessory:	Score stand

* *Design and specifications are subject to change without notice.*